

REMARKS

The Applicant thanks the Examiner for the careful consideration of this application. The Office Action dated April 2, 2009 has been received and its contents carefully considered. Claims 1-6, 12-35 are currently pending in this application. Claims 1-6 have been amended. Support for the amendments may be found, for example, on page 36, line 24 to page 36, line 24 of the specification. Based on the foregoing amendments and the following remarks, the Applicant respectfully requests that the Examiner reconsider all outstanding rejections and that they be withdrawn.

Claim Rejection – 35 U.S.C. § 112

On page 3 of the Office Action, the Examiner rejects claims 1, 4-6, 12-15 and 24-35 under 35 U.S.C. 112, first paragraph, as lacking enablement. Applicant respectfully traverses.

The Examiner points to Figure 3, stating that the figures shows the anode exhaust gas (72) being recycled back via inlet (65) to the same anode *within the same power generating means*, and that there is no recycling either shown or disclosed between the first and second fuel cell stack/power generating means. (emphasis in original) It appears the Examiner has misunderstood the language of the claim. Firstly, the claim does not disclose recycling unreacted hydrogen. Claims 1 for example, states "wherein an anode exhaust gas containing unreacted hydrogen from the first power generating means is supplied to the second power generating means through said converting means and said oxidizing means." Figures 2-11 each illustrate the supply of anode exhaust gas from the anode of the first power generating means (54) being supplied to the anode of the second power generating means (6) through said converting means (4), and optionally through said oxidizing means (5). This is illustrated in figures 2-11, which each show the anode exhaust gas containing unreacted hydrogen (i.e. reformed gas, 27) leaving the reforming means (3) and passing through (at least) the covering means (4) to the second power generating means. The figure is further described for example on page 32, lines 17-25; page 37, line 25- page 38, line 4; and page 38, lines 15-27. For at least this reason, the claims are enabled for "an anode exhaust gas containing unreacted hydrogen from the first power generating means is supplied to the second power generating means through said converting means and said oxidizing means." Applicant respectfully requests the rejection be withdrawn.

On page 4, the Examiner rejects claims 1, 4-6, 12-15, and 24-35 under 35 U.S.C. 112, second paragraph, as indefinite.

The Examiner states that in claim 1, the limitation "said reformed gas supplied" has insufficient antecedent basis. As recommended by the Examiner, the claim has been amended to stated "said reformed gas produced." Applicant respectfully requests the rejection be withdrawn.

On page 4, the Examiner rejects claims 1, 4-6, 12-15 and 24-35 under 35 U.S.C. 112, second paragraph as incomplete for omitting essential structural cooperate relationships. As recommended by the Examiner, the claims have been amended to recite a "flow control valve" to control the amount of waste heat. Applicants respectfully request the rejection be withdrawn.

Claim Rejection - 35 U.S.C. §103(a)

On page 5, the Examiner rejects claims 1, 2, 4 and 5 under 35 U.S.C. 103(a) as unpatentable over Xu (U.S. Patent 6,551,732) in view of Morimoto et al. (U.S. Patent 5,221,586). Applicant respectfully traverses.

Firstly, claims 1-6 require "an amount of air supplied to said first power generating means is controlled so as to be decreased if an amount of said fuel supplied to the reforming means increases" as shown on page 37, line 7-10 of the specification. Similarly, the amount of air supplied to said first power generating means is controlled "so as to be increased if the amount of said fuel supplied decreases" as shown on page 37, line 16-18 of the specification.

As a result, when the supply of air to the cathode 56 is controlled in accordance with the change in supply of a fuel, such as natural gas, the temperature at the first power generating cell is maintained in an appropriate predetermined range (800-1000°C) and power is generated appropriately. Further, the heat at the reforming means is controlled appropriately because an amount of heat supplied to the reforming means is controlled so as to be increased if an amount of said fuel supplied to the reforming means increases and so as to be decreased if the amount of said fuel supplied decreases. Neither Xu nor Morimoto teach or suggest such a control. For at least this reason, the rejection of claims 1-6 should be withdrawn.

Claims 12-35 depend from independent claims 1-6 and overcome the §103(a) rejection for at least the same reasons as claim 1. Reconsideration and withdrawal of the rejection is respectfully requested in view of the foregoing amendments and remarks.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is hereby invited to telephone the undersigned at the number provided.

The Commissioner is authorized to charge any deficiency in any patent application processing fees pursuant to 37 CFR § 1.17, including extension of time fees pursuant to 37 CFR § 1.17(a)-(d), associated with this communication and to credit any excess payment to Deposit Account No. 22-0261.

Respectfully submitted,

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